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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/665,487	09/22/2003	Danald R. Lyons	HAMPT-2C1	6889
23599	7590	01/28/2005	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C.			KIANNI, KAVEH C	
2200 CLARENDON BLVD.				
SUITE 1400			ART UNIT	
ARLINGTON, VA 22201			PAPER NUMBER	
			2883	

DATE MAILED: 01/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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10/665487

EXAMINER
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ART UNIT	PAPER
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Commissioner for Patents

This action is an updated copy of the reason for allowance that was mailed on 12/07/04.

- Applicant's canceling of claims 5-12 and 16-22 in the amendment/response submitted on 9/22/03 and 8/27/04 is acknowledged.

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

This examiner's Amendment is allowed because this application is continuation of application No. 09/953910 filed on 09/18/2001.

Please at top of the first page of the specification insert the following:

This application is continuation of application No. 09/953910 filed on 09/18/2001.

### ***Reason for Allowance***

2. Claims 1-5 and 13-15 are allowed for the following reasons:

The instant application is deemed to be directed to a nonobvious improvement over the invention patented in Pat. No. Bohnert et al. (US 6597821 B1).

Claim 1 is allowed because the prior art of record, taken alone or in combination, fails to disclose or render obvious a planar surface with an optical grating pattern thereon, the optical grating pattern being exposed to the flowing fluid wherein when a beam of laser light is directed through the detector as an input while the fluid is

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flowing over the optical grating, variations in an output of the beam of laser light are indicative changes in fluid pressure or density in combination with the rest of the limitations of the base claim. Although Bohnart's optical waveguide includes an optical grating but it lacks teachings of a planar surface having an optical grating that is exposed to flowing fluid; rather Bohnart's waveguide grating is subjected to anisotropic fluid pressure changes that occurs between waveguide segments P1 and P2 as shown in fig. 6. Claims 2-5 depend on claim 1 and therefore they are also allowed.

Claim 13 is allowed because the prior art of record, taken alone or in combination, fails to disclose or render obvious a planar surface with an optical grating pattern thereon, detecting variations in an output of the beam of laser light indicative changes in fluid pressure or density in the boundary layer adjacent to the grating of the optical waveguide while the fluid is flowing over the grating pattern in combination with the rest of the limitations of the base claim. Claims 14-15 depend on claim 13 and therefore they are also allowed. See analogous arguments, above, present in allowance of claim 1.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

**Contact Information**

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Cyrus Kianni whose telephone number is (571) 272-2417.

The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 6:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font, can be reached at (571) 272-2415.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks  
Washington, D.C. 20231

**or faxed to:**

(703) 872-9306 (for formal communications intended for entry)

**or:**

Hand delivered responses should be brought to Crystal Plaza 4, 2021 South Clark Place, Arlington, VA., Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956.

K. Cyrus Kianni  
Patent Examiner  
Group Art Unit 2883



November 1, 2004